THE

NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION

NEWSLETTER

'Government and Private Agencies Working Together for Better Pavements'



Chair - Joel Condor September, 1998 Vice Chair - Dave Shepard

Sec./Treas. - Vicki Griffiths Volume 5, Number 6



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Words From The Chair

Greetings to all, and hello from south of the border. Well, it must be getting close to conference time again with the turning of the leaves and the cooler mornings. It appears, from everything I have observed, this will be the best NWPMA Fall Conference ever, one you surely should not miss. The conference committee has been working very diligently on it since the conclusion of last year's conference and have put together a tremendous program. A copy of the program and



registration information is included in this Newsletter. Also included is a nomination form for the Keith Kay Memorial Pavement Manager of the Year Award. Please fill out the nomination form and return it to Dave Nichols.

Speaking of the border, last week during one of my many travels, I was sitting out on my patio of my hotel room on a very warm 90 degrees evening enjoying the view of the Columbia River and looking straight across at the city of White Salmon, Washington. At that point I realized how different so many things are by crossing this 4,000 foot wide river. I thought back to a few years ago when cities and counties in Oregon had no idea what the folks in Washington were doing with regards to pavement management. All of this was because of a body of water running between the two states. I am sure there are many groups, trade organizations, and associations in both states that meet often within their own borders, but rarely on a dual or tri-state level. I feel that we in the NWPMA are truly a fortunate group to be able to come together a couple of times a year in the spring and fall. I have now been involved with a few projects with Washington jurisdictions and have seen first hand how, by working together, both states have benefitted. I have also had the opportunity to work with some Idaho jurisdictions along the way and have learned that there is much to gain by having them included in our organization.

Well, hopefully I will be seeing many of you soon in Portland, and hope all is going well with your pavement management endeavors.

Joel M. Conder NWPMA Chairperson

Upcoming Events

Northwest and Puget Sound Chapters

September 16th 1998

City of Kirkland 123 5th Street 10 AM - 12 Noon

Discussion Topics: We will be meeting once again at the City of Kirkland for our September chapter meeting. Sam Obunike of the City of Kirkland had to cancel for July, but has graciously rescheduled for September. He will be discussing how the City of Kirkland's implementation of a pavement management system has increased his departments funding and received support from the City Council. We will also be hearing from Ed Savage from the American Concrete Paving Association who will discuss and answer questions on ultra-thin whitetopping treatments. A number of people have expressed interest in this, and Ed will be happy to supply us with information.

October 14th, 1998

City of Kent 220 4th Street, South 10 AM - 12 Noon

Discussion Topics: Subject and speaker yet to be

determined.

Introduction to the Use of Cold In-Place Recycling September 22, 1998

Yakima Valley Museum Yakima, WA

Cold In-place Recycling (CIR) has been practiced by various methods and under a variety of names for over half a century. Thanks to cooperation between equipment manufacturers, the petrochemical industry, contractors, and government agencies, great advances have been made. Today, the process combines sophisticated engineering and testing procedures, microprocessor blending controls, specially formulated additives, and highly productive machinery to achieve both an economical and quality road surface.

This training course will bring togther experts from industry, government, and contractors. They will cover the following aspects of the CIR paving process:

- 1. Project selection
- 2. Material specifications
- 3. QA/QC of the construction process
- 4. Additives: Quicklime, Emulsions, Water
- 5. Contract administration
- 6. Economics (construction costs)
- 7. Environmental restraints: Weather, Shade, Man-holes, Sub-grade, Curb & Gutter
- 8. Current construction equipment

Materials for the course will be handed out on September 22.

Wealth of Superpave Information Presented at Superpave Conference

by Karen Haas Smith

"We cannot expect the technology of the World War II era to meet the demands of our nation today," said Federal Highway Administrator Kenneth Wykle, keynote speaker at the 'Superpave: Today and Tomorrow "conference April 21-23 in St. Louis. "In the past 10 years alone, traffic volume in this country has doubled and pavement loadings have quadrupled."

The latest news on trends and technology related to Superpave, the high-performance asphalt pavement mix design system, were reported at the conference, sponsored jointly by the Asphalt Institute and the Federal Highway Administration (FHWA).

"Working together, we can have better pavements," Wykle continued. "That means using the best technology and providing training to understand the need for proper mixing, proper temperature when applying to avoid tender zones, proper compaction, sensitivity to weather conditions, prevention of bleeding, rutting, cracking. It also means knowing the specifications and staying within tolerances. Quality is "Job One" with Superpave."

The number of Superpave projects has skyrocketed to 1,339 this coming construction season, which will represent 30 percent of awarded asphalt tonnage and about 16 percent of state asphalt paving programs, compared to just 93 projects representing 2 percent of the market in 1996. Three-quarters of the states plan to implement the Superpave mix design system by 2000, and all but four states will have implemented the Superpave binder specification by then.

Some of the most valuable and timely information exchanged at the conference related to field construction. Superpave mixes can require a greater level of compactive effort. "The key words are: 'attention to detail,' said National Asphalt Pavement Association (NAPA) Vice President Dale Decker, who said 15 percent of respondents to a recent NAPA survey reported having problems achieving specified compaction densities in Superpave projects. Both compaction expert Charles Deahl and New York State's Ron Sines warned against using excessive force, which may cause materials to fracture. On vibratory rollers, higher frequencies (vibrations per minute) and lower amplitudes work better, Deahl said. He recommended using a vibratory read tachometer. Sines, who is Supervisor of New York's Field Engineering Unit, recommended running "team" breakdown rollers, using two vibratory compactors on the mix while it is still very hot to get as many passes as possible while monitoring the mat temperature.

"The trend toward bigger heavier rollers with the Superpave system can damage pavement structure on smaller roads," Sines said. "A large part of our system in New York State is rural roads, and we are wanting to design some finer Superpave mixes for lower-volume roads."

The mysterious "tender zone" -- a temperature zone (generally reported between 200 to 240 degrees F) where some mixes become unstable--was much discussed. "It's not in all the mixes. Sometimes it's not there in the morning, and shows up in the afternoon. We don't know what causes it," Sines said. The tender zone phenomenon seems to be related to ambient temperatures as well, and in some areas of the country it has not been a problem at all. About two-thirds of those responding to the NAPA survey reported some tenderness in the mix. Recommended procedures are to either avoid compaction altogether when the mat temperature reaches those temperatures if tenderness is observed, resuming compaction after the mat cools; or to use a rubber-tired roller, with proper confinement of the mix, for rolling in the tender zone. "Each roller operator needs to understand what temperature zones he should be rolling in," Sines said.

Use of RAP (recycled asphalt pavement) in Superpave is becoming more commonplace, with ongoing research aimed at delivering more knowledge of how recycled materials may affect binder properties.

'Contractors who aren't successful with RAP just dump it in. If you do that you can't use very much of it," said Richard Schreck of the Virginia Asphalt Pavement Association. "If you test it, characterize its properties and treat it like any other material, you can use a lot more of it." About one-half of Virginia Superpave projects use RAP.

Current guidelines on use of RAP in Super-pave, issued by the FHWA's Mixture Expert Task Group in March 1997, call for a three-tiered approach. Aged materials can be stiff and cause cracking. At low levels of RAP use, there is no recommended change to the binder grade. At medium levels, the binder grade is reduced by one level. At high levels, further analysis is required based on "blending charts." Current guidelines are based on empirical experience. Research being conducted at the North Central Superpave Center is aimed at producing improved guidelines based on improved analytical understanding sometime next year.

Permeability problems have emerged on some Superpave projects as well, most notably in northwest Florida where the available aggregates make mixes more susceptible to this problem. Recommended solutions include high in-place densities with strict density monitoring specifications, well-sealed longitudinal joints, and thicker lifts. Florida now uses a 4:1 ratio between lift thickness and maximum aggregate size. Standard Marshall recommendations call for a 3:1 ratio.

Superpave's impact on the aggregate industry was discussed by several speakers, including industry spokespersons who pointed out that new equipment and procedures are required, placing a capital investment burden on many suppliers. Don Green of United Metro Materials in Arizona described how his firm successfully

geared up for Super-pave, changing equipment and processes to accommodate the demand for higher quality, more uniformly graded aggregates.

Lawrence Warren, a Mississippi contractor and the current NAPA President, said, "We love the mix. It's the prettiest mix we've ever run. There are no more Marshall hammers in the state that invented them. Mississippi is 100 percent Super-pave." He called for a "renewed commitment to training to enable the contracting industry to deal with new specifications, materials, and equipment."

Uniformity of the application of the Superpave specifications remains a much-debated issue, with some states and contractors calling for modification of the system to allow greater use of local materials. AASHTO Lead States Superpave Team Leader Paul Mack of New York State encouraged states to comply with the AASHTO Super-pave specifications and to work through the AASHTO standards process to achieve consensus on any future specifications changes.

'Superpave is a system just like your car is a system. If you go out to your auto and start taking parts out of it, pretty soon it's not a system any more, but a pile of parts," Mack said. "Super-pave can be improved, and research is under way that will improve it. But in the meantime, to the extent your state follows specifications you will be in a position to immediately implement future improvements."

"We are committed to assisting the states with new technology but the states must decide when and how to use the technology, "FHWA Administrator Wykel said. "...FHWA is committed to work with the industry and the states to provide the best pavement technologies available in the world."

For more information on Superpave construction issues, readers may wish to consult a new report, Superpave Construction Guidelines, published by the National Asphalt Pavement Association (NAPA) under a cooperative agreement with FHWA. The report, available from NAPA and Cathy Nicholas of the FHWA Washington Division, points out the differences between Superpave mixes and conventional mixes and provides tips on how to prevent these differences from disrupting mix production and pavement construction.

At the NWPMA Fall Conference in Portland in October there will be a session on Superpave. This article gives a good idea on the direction state DOTs are taking in Superpave. It is anticipated that local agencies will using Superpave on a majority of projects in the coming future.

Karen Haas Smith is a communications consultant in Rockville, Maryland who provides ongoing support to the FHWA's Superpave Technology Delivery Team.

WANTED: Email Addresses

Attention all NWPMA members!!! How would you like to receive the NWMPA Newsletter the same day in which it was created? We are currently putting together an address list for those of you who would like to receive their copy of the newsletter by email.

Benefits to the recipient:

- · receives the newsletter the same day it is created
- view the newsletter in color (when color images are present)
- create original hard copies if necessary
- · forward the email to other staff
- receive quicker response back to on an item (e.g., Spring and Fall quarterly's)

Also, by using email we will decrease our reproduction and mailing costs for the newsletter.

For those of you who would like to take advantage of these benefits, please email Paul Sachs sachsp@wsdot.wa.gov, to have your email address added to this list. So far we have been very successful with getting E-mail addresses. To date we have close to 100 individuals that receive the Newsletter by E-mail. Please be the next one.

If you have questions about E-mail and receiving the Newsletter through electronic means, please call Paul Sachs at (360) 705 - 7352.

Topics & articles needed for the Newsletter

We are always looking for ideas of what you would like to see in the Newsletter. If you have a pavement management experience that you would like to highlight to the rest of the NWPMA, please call us and we will discuss how we can adjust it to fit in the Newsletter. In particular, we would like to showcase how local agencies are using pavement management to improve their day to day practices. These type of articles act as catalysts for other local agencies as they offer ideas that may not have been thought of.

Also, if there are topics of interest that relate to pavement management that you would like to see within the Newsletter, let us know. We would like to see the Newsletter adapt to the needs of the NWPMA.

If you are interested in writing an article or have an idea for an article or additional topics please call Paul Sachs at (360) 705-7352.

NWPMA Information Available on the Web

The NWPMA is now on line. Learn about upcoming conferences and Chapter meetings. The is a resource section with links to other pavement related web sites.

The World Wide Web address is as follows:

http://www.wsdot.wa.gov/TA/Mgt.Systems/nwpma.html

The web site is ever changing and we need your input into it development and ongoing use. If there is information that you would like to see placed on the site please let Paul Sachs know. His phone number is (360) 705 - 7352. He can also be reached at the following email address.

Sachsp@wsdot.wa.gov

Pavement Manager of the Year Award

Each year at the Fall NWPMA Conference an individual is honored by his or her peers by being named the recipient of the Keith Kay Memorial Pavement Manager of the Year. Enclosed in the Newsletter is a nomination form. Please nominate an individual and either fax it or send it to Dave Nichols of Thurston County. His fax and telephone number is listed on the nomination form. This is a very important award, so please take the time to fill out the name of a deserving individual and then be there at the Fall Conference to see the award ceremony during the banquet.

NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION NEWSLETTER POLICY

In an effort to communicate and advance the goals of the Northwest Pavement Management Association (NWPMA), a newsletter shall be published on a regular basis for distribution to the membership. The newsletter shall act as an open forum to communicate and exchange information consistent with the NWPMA goals within the following general policy guidelines:

Articles

Any article of interest to the membership may be printed. Articles should generally pertain to the construction, reconstruction and/or maintenance of pavements or the activities of the NWPMA. All members are encouraged to submit news articles for publication.

Advertising

No advertising by vendors or consultants will be allowed. Vendors and consultants will be listed in the Calendar of Events portion of the newsletter.

Any special circumstances requiring consideration of an exception to the above guidelines will be discussed on a case-by-case basis between the editor and the NWPMA chair

This policy was adopted on December 10, 1996.

KEITH KAY MEMORIAL PAVEMENT MANAGER OF THE YEAR

Nominations are now being accepted for consideration of the 1998 Keith Kay Memorial Pavement Manager of the Year award. We are looking for the "movers and shakers" in the pavement management field who might be deserving to join the ranks of all of the previous award winners. The award will be presented to the winner at the 1998 NWPMA Fall Conference in Portland, OR. Please send all nominations and background information to:

Dave Nichols
Thurston County Roads & Transportation Services
2404-A Heritage Ct. SW
Olympia, WA. 98502-6031
FAX 360-786-5582

e-mail: nichold@co.thurston.wa.us

Name of Nominee:			
Reason I am Nominating this Individual			

1998 NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION FALL CONFERENCE October 26-29, 1998

REGISTRATION FORM

Name:
Title:
Organization:
Mailing Address:
City:
State:
Zip Code:
Phone Number:
Fax Number:
E-Mail Address:
Name as you want it to appear on your name tag:
Shirt Size (S,M,L, Etc.) Are you playing golf on Monday, October 26, 1998?
Are you signing up for the One day Tutorial on Multi-Year-Prioritization on 10/26?
I will be having the Top Sirloin or Hazelnut Chicken for the banquet. (Please circle choice.)
Guest (if applicable) will be having Top Sirloin or Hazelnut Chicken. (Please circle choice.)
Special Dietary Needs:
Registration and Meals: \$150.00 per person. Make Checks payable to NWPMA

Registration and Meals: \$150.00 per person. Make Checks payable to NWPMA Additional tickets for Banquet: \$25.50 per person (Guest)

Hotel Accommodations: \$87.00 + 9% tax per night

Doubletree Hotel - Columbia River

1401 N Hayden Island Drive

Portland, Oregon 97217

Hotel Reservations: (503)283-2111 ext. 4185 or ext. 4186

TO RESERVE A ROOM AT CONFERENCE RATES, RESERVATIONS MUST BE

MADE WITH THE HOTEL BY OCTOBER 2, 1998.

SAY YOU ARE WITH THE NWPMA TO GET CONFERENCE RATE.

MAIL OR FAX REGISTRATION AND PAYMENT OR PURCHASE ORDER FOR CONFERENCE BY OCTOBER 2, 1998 TO: Make Checks payable to NWPMA

Judy Elliott

City of Vancouver

Post Office Box 1995

Vancouver, Washington 98668-1995

FAX: (360)696-8588

Phone: (360)696-8290 ext. 8388

Agenda for Portland, Oregon - October 26, 1998 Northwest Pavement Management Association Fall Conference

FHWA Demonstration Project Number 108A Pavement Management Analysis - Multi-Year Prioritization

8:00 - 8:15 AM	Welcoming Remarks/Introduction
8:15 - 9:00 AM	Introduction to Multi-Year Prioritization
9:00 - 10:00 AM	Pavement Performance Analysis
10:00 - 10:15 AM	Break
10:15 - 11:00 AM	Pavement Preservations Strategies and Treatments
11:00 - 12:00 Noon	Prioritization Techniques
12:00 - 1:00 PM	Lunch
1:00 - 2:00 PM	Project Selection Process
2:00 - 3:00 PM	Inter Agency Communication
3:00 - 3:15 PM	Break
3:15 - 4:30 PM	Case Studies: Local Agency NWPMA Users
4:30 - 5:00 PM	Summary/Conclusions

1998 NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION FALL CONFERENCE

TUESDAY, OCTOBER 27

	7:00 a.m 5:00 p.m. Registration a Wilson Room	and Message Center		
7:00 a.m.	Columbia River Buffet w/Belgian Waffle Station			
		ette Room		
8:00 a.m.	Opening Session - Klamath/McKenzie Rooms			
	Joel Conder - Welcome			
	ISTEA Reauthorization, Don Petersen, FHWA			
	Frank Botelho, Senior Engineer, Pavement Division, Office of Engineering			
	FHWA Headquarters, Washington, D.C.			
	Klamath Room	McKenzie Room		
	Michael Rybka, Moderator	Bill McEntire, Moderator		
9:10 a.m.	Superpave 101	GIS w/Infrastructure Management		
	Dr. Rita Leahy, OSU	Larry Harker, AOC		
10:10 a.m.	Refreshment Break in Exhibitor's Area			
	Rogue	e Room		
10:30 a.m.	Utility Crossing Impacts on Pavement Performance	Update on Iowa Study		
	Paul Sachs, WSDOT	Les Olsen, PLS, Thurston County, WA		
		Edward Jaselskis, PhD, Iowa State University		
12:00 p.m.	Roasted Por	k Loin Entree		
	Willamette Room			
1:00 p.m.	Utility Crossing Impacts on Pavement Performance	ESAL Calculations Cars vs. Trucks		
	(Continued)	Alan Curtis, PE, CHEC Engineering Consultants		
-	Paul Sachs, WSDOT			
1:45 p.m.	Net Meetings	Prediction Models, Fact or Fiction		
	Eugene Ryser, County Road Administration Board	Project Level Pavement Management Next Steps		
		Alan Curtis, PE, CHEC Engineering Consultants		
2:30 p.m.		in Exhibitor's Area		
	Rogue Room			
3:00 p.m.	Panel Discussion - Bill McEntire, Moderator, Klamath/McKenzie Rooms			
	Maintenance Practices			
	Jim Huddleston, Asphalt Pavement Association of Oregon,			
	Ed Savage, American Concrete Pavement Association, and			
	,	Pavement Maintenance Company		
5:00 p.m.	Executive Board Meeting Santiam Room			
6:00 p.m.	Dinner (on your own)			

1998 NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION FALL CONFERENCE

WEDNESDAY, OCTOBER 28

7:00 a.m			
5:00 p.m.			
Registration			
and Message Center			
Wilson Room			
7:00 a.m.	Handan Island Continental Devalues		
7.00 a.m.	Hayden Island Continental Breakfast Willamette Room		
8:00 a.m.	Opening Session - Klamath/McKenzie Rooms		
0.00 4.111.	Benefits of Pavement Maintenance		
	Dr. Gary Hicks, OSU		
	Klamath Room	McKenzie Room	
	Michael Rybka, Moderator	Bill McEntire, Moderator	
9:10 a.m.	How to be a PMS Champion	Traffic System Utility (GIS)	
	Mary Erchul, Nichols•Vallerga & Associates	Craig Thompson, Marion County, Oregon	
10:10 a.m.	Refreshment Break in Exhibitor's Area Rogue Room		
10:30 a.m.	Micro-Surfacing and Slurry Seal	Ground Penetrating Radar	
	Steve Olsen, California Pavement Maint. Co.	Don Meyers, PAVEDEX, Inc.	
11:15 a.m.	Engineering Design of Overlay & Rehabilitation -	Approaches to Convey PMS Information	
	A Case Study of Marion County's	Kathryn Zimmerman, Applied Pavement Technology	
	1999 Overlay Projects		
12:00 p.m.	Bud Furber, Pavement Services, Inc.	Puffot	
12.00 p.m.	Deli Buffet Willamette Room		
1:00 p.m.	GPS Technology	SR-View Demo	
1.00 p.m.	Blake Ferris, GeoLine Positioning Systems, Inc.	Hans Cregg, WSDOT TransAid	
	Blake I ettis, Goozine I oskiolning Systems, Inc.	rians crogg, was or rians no	
1:45 p.m.		Oregon's Statewide Implementation Status	
•		Michael Rybka, Marion County, Oregon	
2:30 p.m.	Refreshment Break	in Exhibitor's Area	
	Rogue	Room	
3:00 p.m.	· · · · · · · · · · · · · · · · · · ·	Moderator, Klamath/McKenzie Rooms	
		lts Into Action	
		portation Commission	
	William A. Gille, Public Works Director, Yamhill County and		
5.00		ons Department, City of Tualatin	
5:00 p.m.		Time	
6:30 p.m.	Banquet, Awards Presentation, Election Results Entertainment		
	Enterta	anment	

1998 NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION FALL CONFERENCE

THURSDAY, OCTOBER 29

7:00 a.m 12:00 p.m. Message Center Wilson Room					
7:00 a.m.	Hayden Scramble Entree				
	Willamette Room				
8:00 a.m.	Opening Session				
	Klamath/McKenzie Rooms				
	Infrastructure Management				
	Dr. Roger Smith, PhD, PE				
	Texas A & M University				
	Klamath/McKenzie Rooms				
	Michael Rybka, Moderator				
9:00 a.m.	Innovative Maintenance Treatments for Asphalt Pavements				
	John Hopkins, Director, Technology Transfer Program,				
	University of Idaho				
10:00 a.m.	Refreshment Break in Exhibitor's Area				
	Rogue Room				
10:30 a.m.	Report on 4 th International Conference on Pavement Management				
	Linda Pierce, Pavement Engineer				
	WSDOT				
12:00 p.m.	Conference Adjourns				

1998 NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION FALL CONFERENCE

CONFERENCE MENUS

Monday, October 26 On Your Own for the Multi-Year Prioritization Class

Tuesday, October 27

Breakfast Columbia River Buffet with Belgian Waffle Station

Freshly Squeezed Orange and Grapefruit Juices; Array of Seasonal Fresh Fruit and Berries; Scrambled Eggs w/Onion and Tillamook Cheddar Cheese; Crisp Bacon Strips, Link Sausage; Cumin Roasted Yukon Gold Potatoes; Breakfast Breads, Danish and Muffins; Butter, Jams and Jellies; Freshly Brewed Coffee, Decaffeinated Coffee, Assorted Herbal Teas and Milk; Belgian Waffle Prepared to Order and Served with

Assorted Fruit Toppings, Warm Maple Syrup and Fresh Whipped Cream

Lunch Roasted Pork Loin Entree

Rosemary Roasted Pork Loin w/Cornbread Stuffing, Crushed Red Pepper and Thyme Au

Jus, Served w/Roasted Red Potatoes

Dinner On Your Own

Wednesday, October 28

Breakfast Hayden Island Continental Breakfast

Freshly Squeezed Orange and Grapefruit Juices, Sliced Fresh Fruit and Seasonal Berries, Selection of Freshly Baked Breakfast Danish, Muffins and Croissants, Butter, Jellies, Freshly Brewed Coffee, Decaffeinated Coffee, Assorted Herbal Teas and Milk

Lunch Deli Buffet

Crisp Seasonal Greens w/Peppercorn Ranch or Herb Vinaigrette; Yellow Yukon Potato Salad; Marinated Vegetable and Pasta Salad; Deli Meats and Cheese Including: Smoked Ham, Roasted Beef, Roasted Turkey, Swiss Cheese, Tillamook Cheddar Cheese and Monterey Jack Cheese; Freshly Baked Deli Breads; Dijon Mustard, Pepper Relish, Mayonnaise, Onion Relish; Sweet Selection of Assorted Pastries, Brownies and Cookies;

Freshly Brewed Coffee, Premium Herbal Teas, Iced Tea and Milk

Dinner Top Sirloin Entree or Hazelnut Chicken Entree

(No Host Bar Available During Banquet)

Top Sirloin w/Cabernet Butter Sauce and Caramelized Onions

Hazelnut Chicken Pan Seared, Crushed Hazelnut Coated w/a Country Wine Butter

Served w/Blended Wild Rice Pilaf

All Dinner Entrees Include: Bakery Fresh Rolls Served in a Bread Basket, Choice of Soup or Salad, Fresh Seasonal Vegetables, Choice of Dessert, Freshly Brewed Coffee,

Decaffeinated Coffee, Premium and Herbal Teas, Iced Tea and Milk

Thursday, October 29

Breakfast Havden Scramble Entree

Freshly Scrambled Eggs Served w/ Tillamook Cheddar Cheese

All Breakfast Entrees Include: Choice of Fresh Orange or Grapefruit Juice, Choice of Bacon, Sausage or Ham Slice, Breakfast Potatoes, Breakfast Breads, Danish and Muffins, Freshly Brewed Coffee, Decaffeinated Coffee, Assorted Herbal Teas and Milk